**Team Reflection EDLD 5364 - Teaching w/ Technology ET 8026**

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EDLD 5364: Team Reflection

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**Our Group Project Task was to model how technology can positively impact student achievement for diverse learners. As a school-based expert, we were given the opportunity to model how technology could positively impact student achievement for diverse learners. Our learning team was given the task of being a school based expert directed by the principal to work with a classroom teacher to create learning experiences that could not only meet the needs of a very diverse classroom community, but also address 21st Century learning trends. Some of the students in the classroom had very unique needs. With a classroom of 30 students, 10 of these students were identified as gifted and talented along with two students that had extreme disabilities of blindness and a hearing-impaired disability. Eighteen students had varied needs ranging from the lowest to high levels of achievement. The teacher in this very diverse classroom had minimal understanding of how to teach with technology to benefit student learning.**

**Our group of five; Amy Zbylut, Greg Gedeon, Joyce Howard, Maridale Still, and Regina Jackson decided to become a group to solve this group scenario. After group reflection, it was determined that we had the most group experience in the area of 8th grade science and we would address the 8th grade TEKS objectives relating to natural events impacting Earth systems, the rock cycle process and the earth's physical changes due to erosion and weathering, and plate tectonics. To meet and discuss our project, we met on a Skype conference call. We discussed the project for over an hour and easily divided our project into separate tasks that we were each responsible for. Each one of our group members readily took on their individual responsibilities and began to complete their tasks dealing with their particular content area. Our Google site offered easy accessibility to our project and the Action Planning area provided an area where we could type our plans to collaborate with each other. We checked all aspects of the 8th grade science TEKS and technology TEKS to make sure that we met all state standards in these necessary areas. Each group member prepared their own UDL lesson and then posted learning activities, technology products, and eBooks that related to their particular lessons, goals, and objectives. We each worked carefully to include 21st century tools and embedded these in our UDLs. A couple of our group members chose to use Glogster to illustrate their UDLs. We also took time to make sure that we used strategies that would work specifically with the students that had special learning needs. Each group member began diligently preparing their information, making their posts, and searching for creative methods to integrate technology into the lessons to provide for best methods to utilize technology to benefit student learning in this very diverse classroom. We were also aware (acting as the tech leader) as we progressed with planning for the classroom scenario, that we would need to meet the professional development needs of this teacher that had minimal understanding of how to teach with technology. Our group members included professional development training to each UDL lesson to assure that the teacher would have easy access to the tools and information needed to adequately address his/her needs for technology instructions and training. Each of our UDLs included assessments, reteach opportunities, and enrichment lessons that would allow for feedback and assured learner understanding of the content and subject area. We filled our UDLs with technology rich activities to provide for learner centered learning environments. The students would easily be able to share their prior knowledge, review concepts, and acquire new knowledge to help them gain a better understanding of the essential learning.**

**After each group member completed posting their UDLs / individual glogs and provided associated lesson introduction, learning activities, hands on activities, 21st century technology tools, guided practice explanation, independent practice explanation, formative/ongoing assessment, and summative/end of lesson assessment, our project was posted to the unit glog. We also provided materials and possible teacher professional development opportunities in our unit plan. –Maridale**

The challenge of the scenario was choosing the activities that would meet the technology requirements, as well as, the diverse learning styles and needs of the students. In our brainstorm document, emails and Skype conference, we discussed the technology options available for activities that met the requirements of the scenario. Each activity we chose for our solution focused on the three learning networks: recognition, strategic and affective (Rose, D, & Meyer, A., 2002). To support the students as they recognize patterns in the learning, we chose a variety of ways to present the information to the students. According to Rose and Meyers (2002), "Choice enables those with disabilities affecting a particular modality to access the information via another one. It also enables students to find the format or medium that appeals to and works best for them, increasing their access to learning" ("Designing Instruction to Support Recognition Learning ", para. 11). Our choices for presenting new information to the students included websites, videos, eBooks, and discussions. Students can use the digital media options, both at school and home, to recall prior learning and add new information to their knowledge base. Building strategic learning skills and engaging students in the learning was our next challenge. Our solution was to offer the students options on how they would learn the material. The activities were diverse so all students would be able to choose one that allowed them to learn in their modality. The choices were flexible enough to give the teacher opportunities to differentiate for all learning levels and abilities. The activities include many Web 2.0 tools, for example, blogs, Glogs, and wikis. "Using these tools and other technologies to educate, the students become engaged and motivated in the learning" (Solomon, G., & Schrum, L., 2007). –Joyce

Effective professional development is essential to the successful implementation of our group project. In order to solve the professional development piece of our scenario our team agreed that the teacher assigned to the unit would be introduced to Glogster two weeks prior to implementing this unit. Based on the scenario and teacher’s

limited technology experience, this will allow the teacher to become familiar with and have adequate time to explore the unit and embedded 21st Century tools. We will use technology to teach technology. We chose several key technologies that incorporate the collaboration aspect for 21st century learning to place in our "Learning Activities” section of our Google site. A few skills that will need to be addressed are integrating Web 2.0 tools such as Wikispaces and Google docs, UDL Lesson Plans, UDL Book Builder, Glogster and creating activities with students who need login credentials would include assessment, hands-on training, and ongoing training and support. Solomon and Schrum cover several factors related to professional development that help teachers implement technology. Solomon and Schrum (2007) promote “just in time” training as a means of preparing teachers to use tools authentically to increase teacher understanding of Web 2.0 as well as teacher comfort with using the technology in their classrooms. We included hands-on training to build teacher confidence in the technology integrated into each lesson. The rationale behind our plan was to attempt to differentiate instructional methods for the teacher in the same way we would for students. Once the teacher has completed this unit and is comfortable using glogs and UDL units, we would provide additional professional development that would allow the teacher to make their own Glogs and UDL units. Teachers will also be able to view two videos furnished on the CAST site that shows how to design and deliver UDL lessons at the following links:

Module 1: http://udlonline.cast.org/page/module1/l3/

Module 2: http://udlonline.cast.org/page/module2/l3/

Week four's video Harness Your Students' Digital Smarts, IT Director Vicki Davis focused on the fact that teachers do not have to know how to do everything, involving students in real-world tasks. Our team utilized this theory in our professional development considerations. Linking new information to prior knowledge requires effective communication and collaboration among teachers, students, and others. It is not necessary for the teacher to be an expert for our unit, but rather feel comfortable allowing the students some independence. We have also provided video training links and documents in the Unit's Google site, so that the teacher could have access to 24/7 training materials. -Regina

“UDL does more than insist on flexibility; it provides teachers with the information and resources they need to achieve it” (Rose, D., & Meyer, A., 2002, Chapter 4). Our team project allowed us the flexibility to be creative thinkers while creating a UDL unit that would simplify a classroom teacher’s integration of technology. We were able to provide the teacher with the resources that he/she needed to achieve an engaging learning environment through technology integration. By creating our team glog, we gave the teacher flexibility in using a variety of resources that are all accessible from one Glogster poster. Our team’s collaborative experiences are an epitome of Pitler’s statement, "web-enabled collaborative learning has evolved dramatically from its initial use as a simple way for students to look up information together on Web sites" (Pitler, 2007, p.144). The activities and collaboration throughout this project has allowed us to evolve as technology leaders. Throughout this collaborative team project we have used new technologies that gave us the “opportunity to respond to the multifaceted individual differences in our student population by providing more varied media, tools, and methods” (Rose, D., & Meyer, A., 2002, Chapter 1). -Amy

**I have to say, our group worked so well together as a team! Each team member took on their responsibilities and did an awesome job with their content and curriculum areas! This was an awesome group of educators to work with and I really enjoyed working with each and every one of them. We all brought some experience and knowledge to the project and I think we all participated equally in producing a lesson unit that could provide the necessary components for meeting the needs of this teacher in a very diverse learning environment. This Natural Events Unit Impacting Earth Systems could be very helpful to an 8th grade teacher working in this type of diverse learning classroom. The students would spend 12-16 days in the Earth Science subject area working with TEKS learning objectives about types of rocks, the rock cycle, and how rocks are formed and reshaped by erosion and weathering. They would also learn about plate tectonics and its effects on the rock cycle process. This has been a great technology learning opportunity for our group members and I feel that we have each worked together as a great learning team. In the process, we learned a great deal about working with our teachers and campuses in various classroom scenarios. -Maridale**

**GoAnimate.com**: Earth Cycles UDL Lesson <http://goanimate.com/movie/0bl6eyPXt7WA?utm_source=embed&uid=0ASUODSX-2n0> by ggedeon - Gregory

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